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ART 34 AMDT

We claim:

1. The use of a copolymer A containing
 - a) from 50 to 99% by weight of at least one N-vinyllactam or N-vinylamine selected from the group consisting of N-vinylpyrrolidone, N-vinylpiperidone, N-vinylcaprolactam, N-vinylimidazole, methylated N-vinylimidazole, and N-vinylformamide, and
 - b) from 1 to 50% by weight of at least one monomer selected from the group consisting of
 - b₁) C₈-C₃₀-alkyl esters of monoethylenically unsaturated C₃-C₈ carboxylic acids;
 - b₂) N-C₈-C₃₀-alkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
 - b₃) N,N-C₈-C₃₀-dialkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
 - b₄) vinyl esters of aliphatic C₈-C₃₀ carboxylic acids; and
 - b₅) C₈-C₃₀-alkyl vinyl ethers
2. The use as claimed in claim 1 of a copolymer A containing
 - a) from 60 to 99% by weight of N-vinylpyrrolidone and
 - b) from 1 to 40% by weight of at least one monomer selected from the group consisting of
 - b₁) C₈-C₃₀-alkyl esters of monoethylenically unsaturated C₃-C₈ carboxylic acids;
 - b₂) N-C₈-C₃₀-alkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
 - b₃) N,N-C₈-C₃₀-dialkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
 - b₄) vinyl esters of aliphatic C₈-C₃₀ carboxylic acids; and
 - b₅) C₈-C₃₀-alkyl vinyl ethers.
3. The use as claimed in claim 1 or 2 of copolymer A containing
 - a) from 60 to 99% by weight of N-vinylpyrrolidone and
 - b) from 1 to 40% by weight of at least one monomer selected from the group consisting of

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- b₁) C₁₂-C₂₂-alkyl esters of monoethylenically unsaturated C₃-C₈ carboxylic acids;
- b₂) N-C₁₂-C₁₈-alkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
- 5 b₃) N,N-C₁₂-C₁₈-dialkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
- b₄) vinyl esters of aliphatic C₈-C₁₈ carboxylic acids; and
- b₅) C₈-C₂₂-alkyl vinyl ethers.
- 10 4. The use as claimed in any of claims 1 to 3, wherein the copolymer A contains up to 30% by weight of further, free-radically polymerizable monomers.
- 15 5. The use as claimed in any of claims 1 to 4, wherein the copolymer A is used in amounts of from 0.1 to 25% by weight, based on the total amount of polymers used.
- 20 6. The use as claimed in any of claims 1 to 4, wherein the copolymer A is used in combination with one or more further polymers.
- 25 7. The use as claimed in claim 6, wherein further polymers used, polymers B, are hydrophobic polymers selected from the group consisting of polysulfones, polycarbonates, polyamides, polyvinyl chloride, hydrophobically modified acrylic polymers, polyethers, polyurethanes, polyurethane copolymers, water-insoluble cellulose derivatives, and mixtures of such polymers.
- 30 8. The use as claimed in claim 7, wherein the hydrophobic polymers B are used in amounts of from 50 to 99.9% by weight, based on the total amount of polymers used.
- 35 9. The use as claimed in any of claims 1 to 8, wherein further polymers used, polymers C, are hydrophilic polymers selected from the group consisting of polyvinylpyrrolidones, polyethylene glycols, polyethylene glycol monoesters, polyethylene glycol-propylene glycol copolymers,
- 40 water-soluble cellulose derivatives, polysorbates, and mixtures of such polymers.
- 45 10. The use as claimed in claim 9, wherein the hydrophilic polymers C are used in amounts of from 10 to 40% by weight, based on the total amount of polymers used.

11. A semipermeable, water-wettable membrane comprising at least one copolymer formed from
- 5 a) from 50 to 99% by weight of at least one N-vinyl lactam or N-vinylamine selected from the group consisting of N-vinylpyrrolidone, N-vinylpiperidone, N-vinylcaprolactam, N-vinylimidazole, methylated N-vinylimidazole, and N-vinylformamide, and
- 10 b) from 1 to 50% by weight of at least one monomer selected from the group consisting of
- b₁) C₈-C₃₀-alkyl esters of monoethylenically unsaturated C₃-C₈ carboxylic acids;
- 15 b₂) N-C₈-C₃₀-alkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
- b₃) N,N-C₈-C₃₀-dialkyl-substituted amides of monoethylenically unsaturated C₃-C₈ carboxylic acids;
- b₄) vinyl esters of aliphatic C₈-C₃₀ carboxylic acids; and
- 20 b₅) C₈-C₃₀-alkyl vinyl ethers.
12. A membrane as claimed in claim 11, obtainable using a copolymer A in amounts of from 0.1 to 25% by weight.
- 25 13. A membrane as claimed in claim 11 or 12, comprising as hydrophobic polymer component B a polymer selected from the group consisting of polysulfones, polycarbonates, polyamides, polyvinyl chloride, hydrophobically modified acrylic polymers, polyethers, polyurethanes, polyurethane copolymers, 30 cellulose acetates, cellulose nitrates, and mixtures thereof.
14. A membrane as claimed in any of claims 11 to 13, comprising a hydrophilic polymer C selected from the group consisting of polyvinylpyrrolidones, polyethylene glycols, polyglycol 35 monoesters, copolymers of polyethylene glycol with propylene glycol, water-soluble derivatives of cellulose, polysorbates, and mixtures thereof.